

REMARKS

I. Claim Amendment

Claims 4, 9, 12 and 17 have been amended for clarity.

No new matter is added. The Examiner is requested to enter the amendment and reconsider the application.

II. Information Disclosure Statement

Applicants have submitted Supplemental Information Disclosure Statement on December 6, 2004. Applicants request that the Examiner consider the IDS and return an initialed copy of 1449 Form to Applicants.

II. The Response

Election/Restriction

Applicants confirm election of Claims 1-18 for prosecution and reserve the right to file one or more continuation applications based on the cancelled claims.

Applicants also confirm no change of the inventorship for the invention presently claimed.

Claims 1-4

Claims 1-4 are rejected under 35 USC 103(a) as allegedly being obvious over Chen et al (US Patent No. 6,545,797) in view of Thomas et al (US Patent No. 4,798,849).

US Patent No. 6,545,797 was issued April 8, 2003, which is after the priority date (November 25, 2002) of the instant application. The '797 patent can only possibly qualify as prior art under 102 (e). Because the subject matter of the '797 patent and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person, the '797 patent shall not preclude patentability under 35 USC 103 (c).

As to Thomas et al, the reference does not disclose "liquid crystals."

Thomas et al disclose dissolving or dispersing a "liquid crystalline polymer" into a bulk polymer. Examples of the liquid crystalline polymer given in the reference include a polymer of a monomer having ethylenic unsaturation and an internal grouping of a certain structure, or a polymer of a monomer of another structure, or a polymer of an ethylenically unsaturated steroid derivative (see Summary of the Invention section). The polymers disclosed in Thomas may have liquid crystalline structures, but they are not the so-called "liquid crystals" as claimed in the instant application. The liquid crystals of the instant application are rod-like molecules such as those typified by a cyanobiphenyl compound. These liquid crystal molecules possess the property of rotating the direction of polarized light passing through.

Therefore, Thomas et al do not render Claims 1-4 obvious.

Claims 5-9 and 14-17

Claims 5-9 and 14-17 are rejected under 35 USC 103(a) as allegedly being obvious over Morita et al (US Patent No. 6,400,492) in view of Oguchi et al (US Patent No. 6,650,384).

Morita et al disclose an electrophoretic display liquid medium. The passages cited by the Examiner disclose a long laundry list of matrix material, thermosetting resins, and photo-polymerizable oligomers. In the absence of blaze marks, the disclosure would not reasonably lead those skilled in the art to any particular species, let alone the combination of some particular species as claimed in the instant application. The Examiner's reliance on this reference, however, appears to be totally based on hindsight. In other words, it appears that the Examiner has selected certain materials from the long list of materials disclosed in Morita et al, with the foreknowledge of the present invention. This is improper in assessing patentability of an invention.

More importantly, Morita et al do not disclose or suggest the combined use of a thermoplastic, a thermoset or a precursor thereof and a speed enhancing comonomer or oligomer. In paragraph [0052], the instant application describes that

adding a speed enhancing comonomer or oligomer in the microcup composition can improve the switching rate and reduce the operation voltage or reorientation field strength. Thus, the combined composition provides unexpected advantages.

Oguchi et al disclose a liquid crystal display and display method. This references adds nothing to render the subject matter of Claim 5 obvious because it does not in any way suggest or encourage the combined use of a thermoplastic, thermoset or a precursor thereof and a speed enhancing comonomer or oligomer.

Therefore, the 35 USC 103(a) rejection of Claims 5-9 and 14-17 over Morita et al in view of Oguchi et al should be withdrawn.

Claims 10-13

Claims 10-13 are rejected under 35 USC 103(a) as being obvious over Chen et al in view of Thomas et al and Schmidt (CA 2,340,683).

The discussion above of Chen et al and Thomas et al is also applicable to these claims.

As to Schmidt, the Examiner apparently has misunderstood Figure 2 of the reference. Figure 2, in fact, is a top view (see page 7, lines 24-28) of a display panel. From the top view, rows and columns on the same layer are seen in this figure. However the term “two or more layers” referred to in the present Claim 10 is from the cross-section view as shown, for example, as shown in Figures 3a and 3b of the present application. Therefore, Schmidt does not teach or suggest two or more layers of microcup array of the present Claim 10 and its dependent Claims 11-13.

For clarification, the term “staggered” in Claim 13 is intended to mean that one active area of a first layer of the microcup array is substantially overlapped with an inactive area of a second layer which is on top, or underneath, the first layer (see, for example, Paragraph [0021]). Figure 2 of Schmidt is irrelevant as it only shows rows and columns of cell openings on the same layer, from the top view.

Therefore, the 35 USC 103(a) rejection of Claims 10-13 over Chen et al in view of Thomas et al and Schmidt (CA 2,340,683) should be withdrawn.

Claim 18

Claim 18 is rejected under 35 USC 103(a) as being allegedly unpatentable over Morita et al in view of Oguchi et al as applied to Claims 5-9 and 14-17 and further in view of Schmidt.

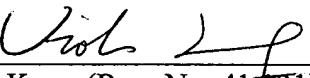
The discussion above of Morita et al, Oguchi et al and Schmidt also applies to Claim 18. The references, considered alone or together, do not render the subject matter of Claim 18 obvious.

CONCLUSION

Applicants believe that the application is now in good and proper condition for allowance. Early notification of allowance is earnestly solicited.

Respectfully submitted,

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Viola T. Kung (Reg. No. 41131)

HOWREY LLP
2941 Fairview Park Drive, Box 7
Falls Church, VA 22042
Tel: (650) 463-8181
Fax: (650) 463-8400